



# Lean 6-Sigma Program



## *California Department of Corrections and Rehabilitation*

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**Project Greenbelt**

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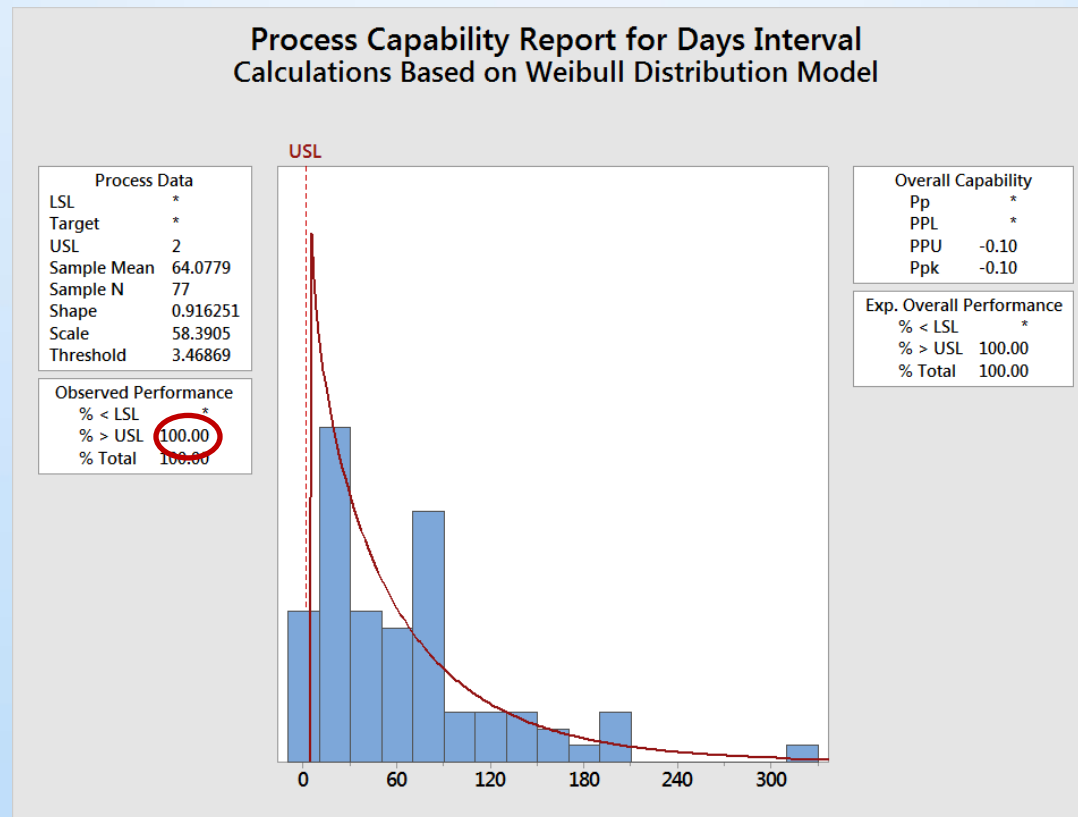
**Executive Sponsor**

# *Reduction of Processing Time for Payroll Accounts Receivable*

- ❖ **Problem Statement:** *State employees may not legally receive more money than they earned in a pay period, however, inadvertent overpayments do occur. Per Government Code 19838, the state is required to notify the employee in writing when an overpayment has been made prior to any recoupment action. Our baseline showed that only 15% of accounts receivable (AR) notification letters were issued to employees in a timely manner.*
- ❖ **Objective:** *To reduce the processing time so that 95% of AR notification letters are issued within two business days from their establishment dates.*
- ❖ **Project Team:**
  - ❖ *Alene Shimazu – Executive Sponsor*
  - ❖ *Katherine Minnich – Champion*
  - ❖ *Jennifer Nolan– Process Owner*
  - ❖ *Cynthia Arnaiz – Green Belt*
  - ❖ *Kathy Woolery – Team Member (Accounting)*
  - ❖ *Susan Salisbury – Team Member (Accounting)*

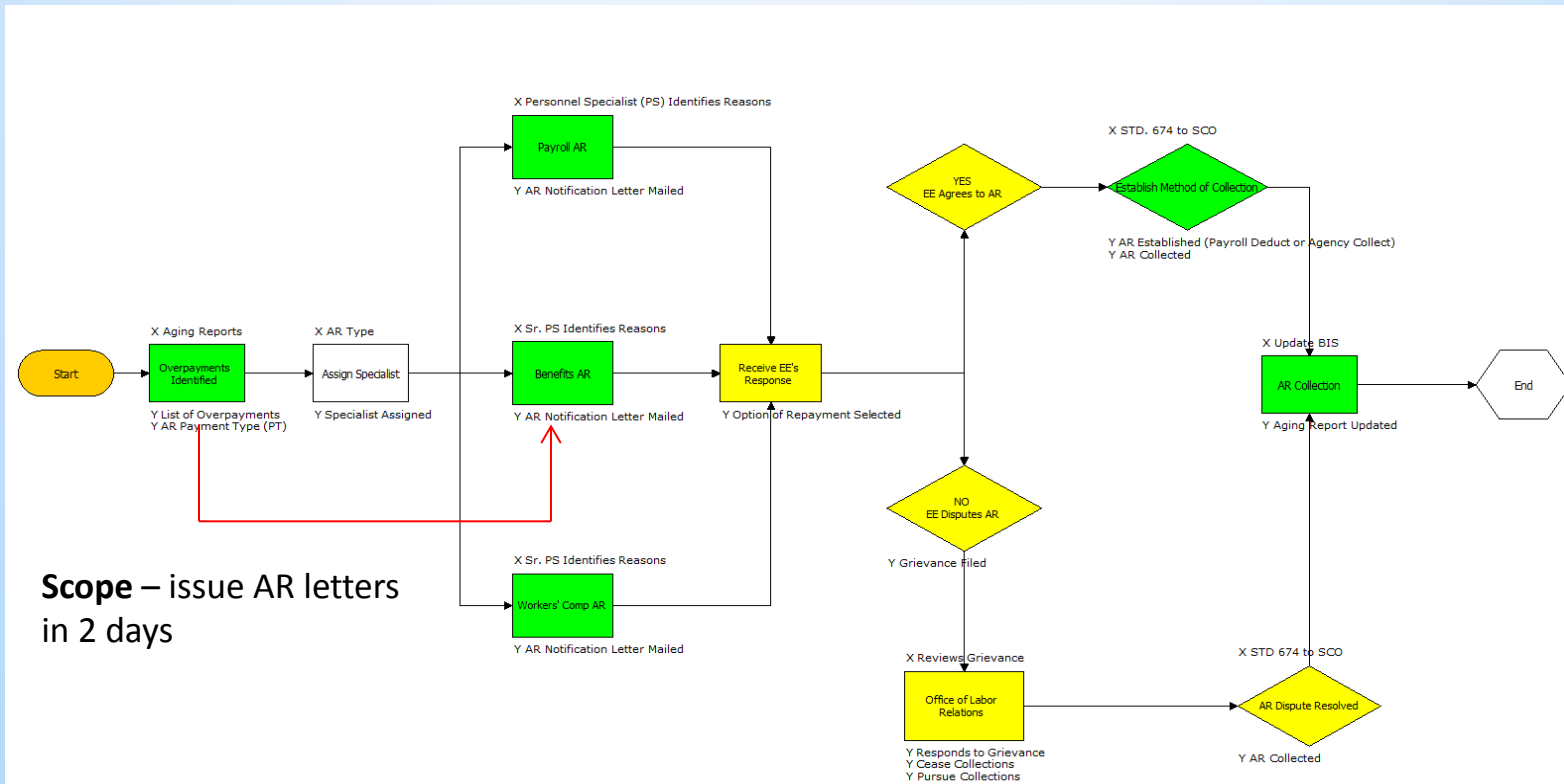


# Baseline Capability



- ❖ Sample Mean - 64 days; Sample Max - 300 days
- ❖ Historically, 0% of AR notification letters were mailed within the two day target.
- ❖ From the customer's (CDCR) perspective, this long delay impedes our collection activity thus, impacting our fiscal liability.

# Initial Process Map



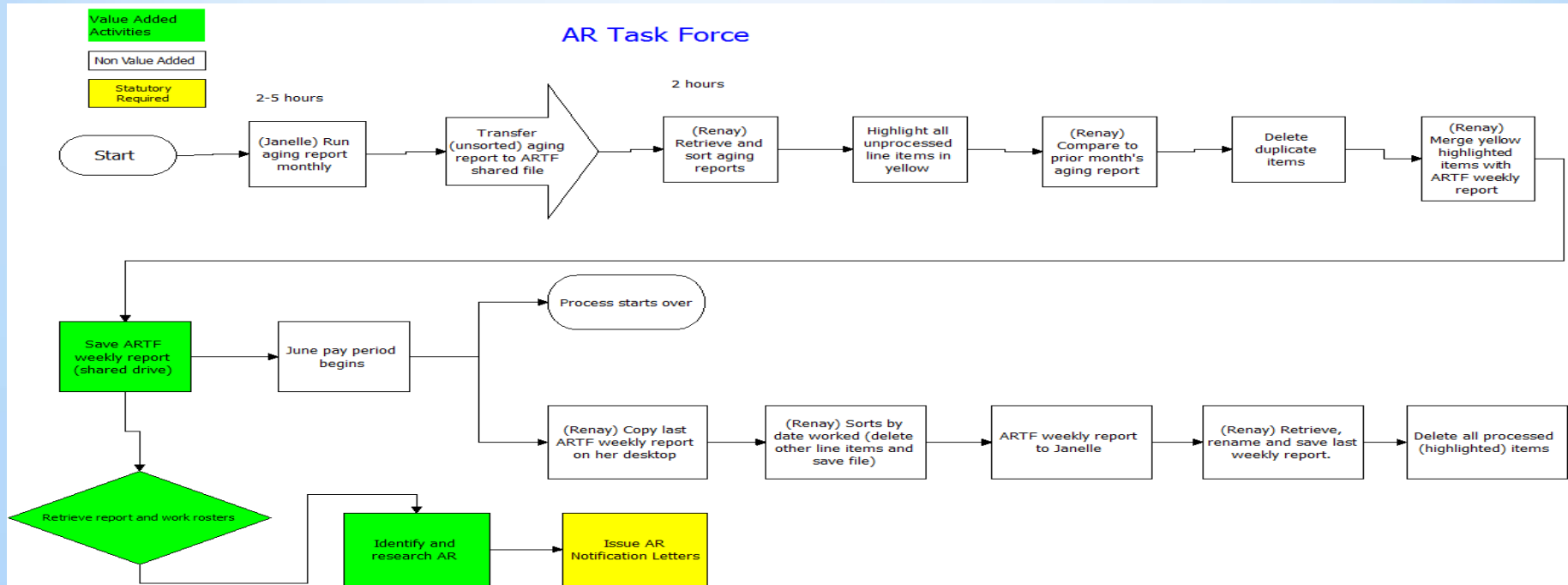
- ❖ Assigning specialists is a non value-added step (white). Due to the complexity of reviewing the reasons for the AR, the NVA activity may not be totally eliminated.
- ❖ Value-added steps (green) and non value-added steps that are statutorily required (yellow) remain the same.

# *Analysis Tools*

Analytical tools used to determine critical Xs include:

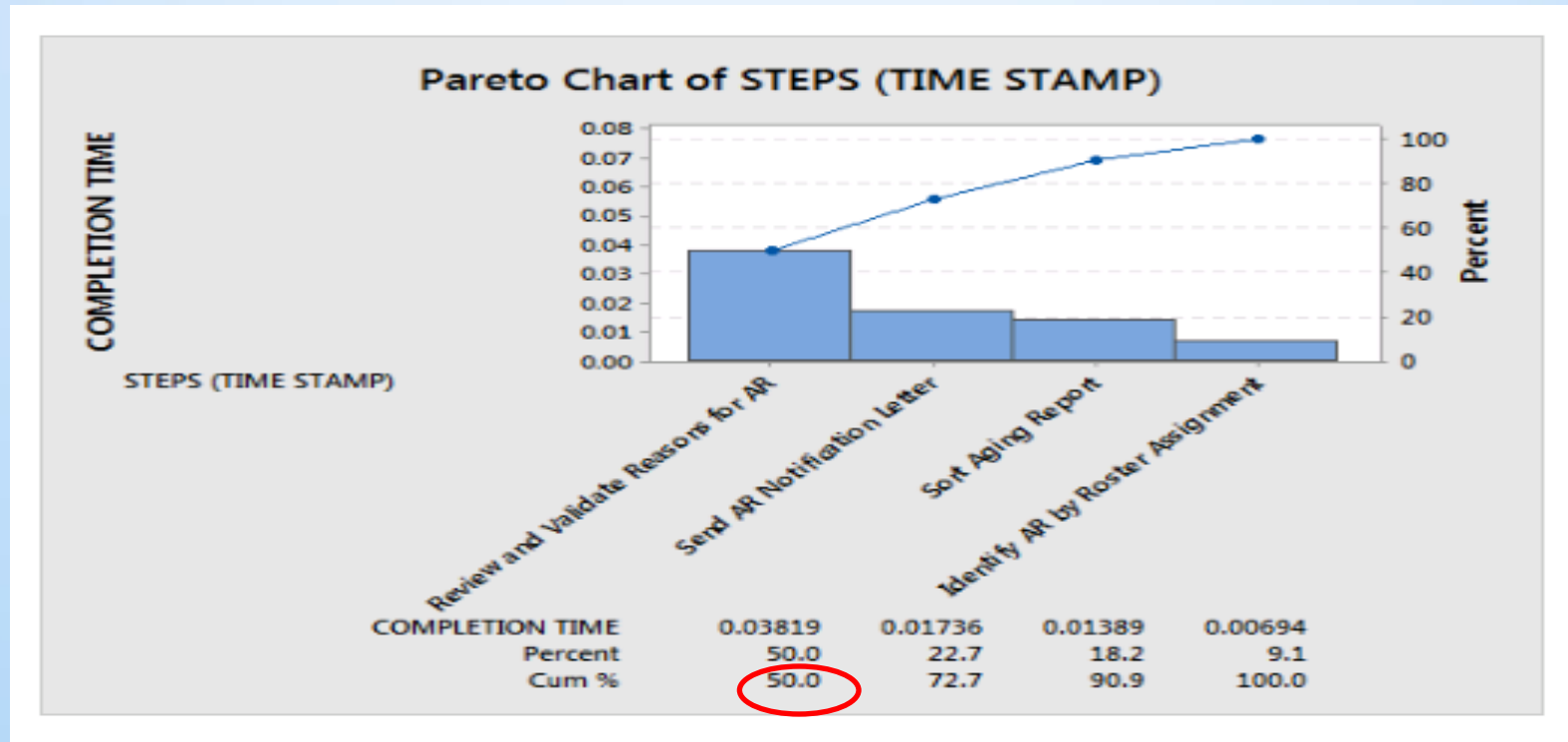
- ❖ Process mapping identified the non-value added steps.
- ❖ Fishbone diagram to brainstorm all steps in the AR notification process.
- ❖ Manual data collection for completion and cycle time analysis.
- ❖ Pareto Charts for Cycle Time and Completion Time analysis.
- ❖ Failure Mode and Effects Analysis to identify critical Xs and proposed improvements.

# Key Analytical Finding 1- Identifying NVA Activity



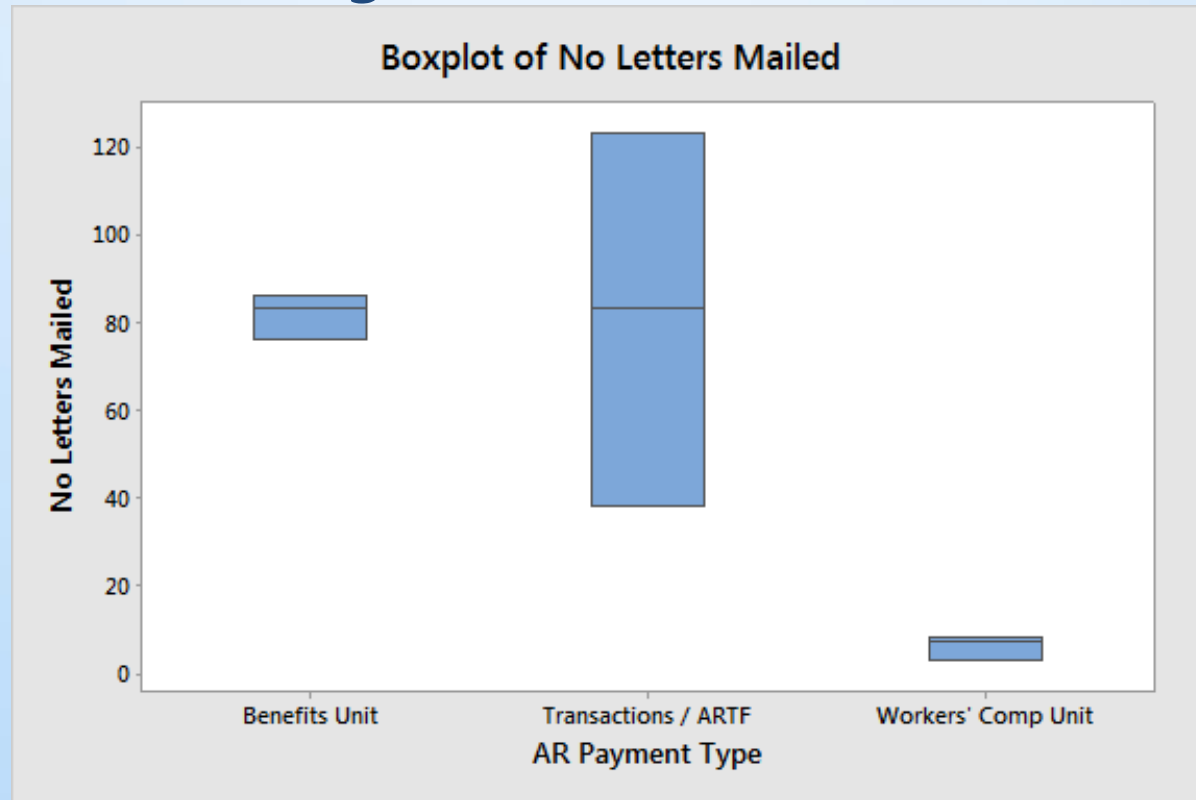
- ❖ All four units (Transactions, Health Benefits, Workers' Comp and the AR Task Force) were running and sorting the aging reports every month to meet their specific needs.
- ❖ Detailed process map of the ARTF Unit identified 13 non value-added steps and several rework loops.
- ❖ Multiple levels of review and edits were being performed throughout the process by the supervisor and specialists.

## Key Analytical Finding 2 – Quantifying Completion Time by Process Step



- ❖ The review and validation of the reasons for the overpayments are significantly contributing to the overall completion time.
- ❖ We need to assess the level of personnel specialists' knowledge on payroll ARs.

## *Key Analytical Finding 3 – Identifying Units Where Defects are Occurring*



- ❖ Ninety days of data showed that letters were not mailed for Payroll and Benefit ARs within the 2 day target.
- ❖ Opportunities for improvement lie in the Benefits and Transactions Units.

# *Critical Xs (root causes of problems)*

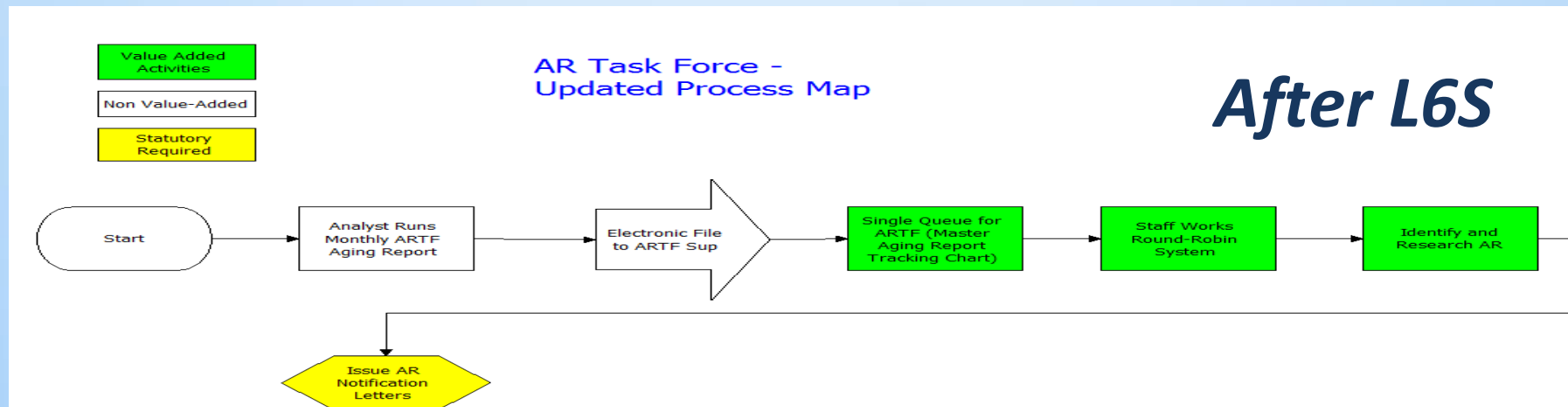
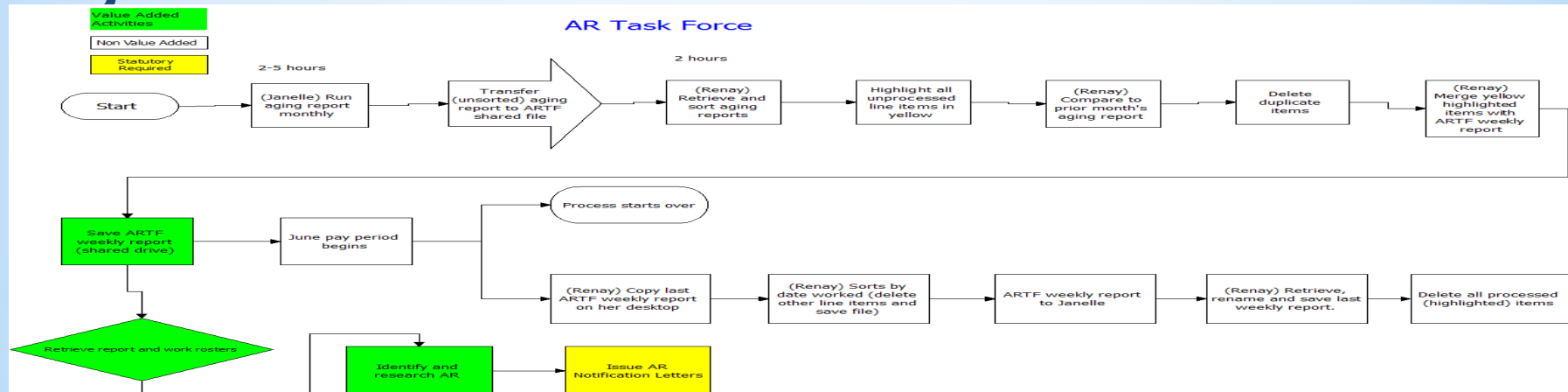
- ❖ Unbalanced workload.
- ❖ Lack of standard work. AR Expectation Memo was not being implemented.
- ❖ Personnel Specialists' level of knowledge contributed to the delay in identifying the reasons for the ARs.

# *Improvement Techniques*

- ❖ Refined and enforced standard work with a simplified process map.
- ❖ Flexibility and Work Flow
  - ❖ Implementing the round-robin system in the following units:
    - ❖ ARTF Unit effective 7/25/16
    - ❖ Transactions Unit effective 8/1/16
    - ❖ Benefits Unit effective 9/1/16
  - ❖ Co-locating the specialists and supervisors in the same work area to improve work flow. (In phases with a projected date of August 2016)
- ❖ Visual Management
  - ❖ Clear instructions for the round-robin system are displayed on specialists' cubicle walls in the ARTF Unit.
  - ❖ Visual aid for standard work and job instructions.
  - ❖ Clearing the visual clutter on specialists' desk by designating every Friday as the "5S" activity day.
- ❖ System automation to generate AR Notification Letters to employees (under development).

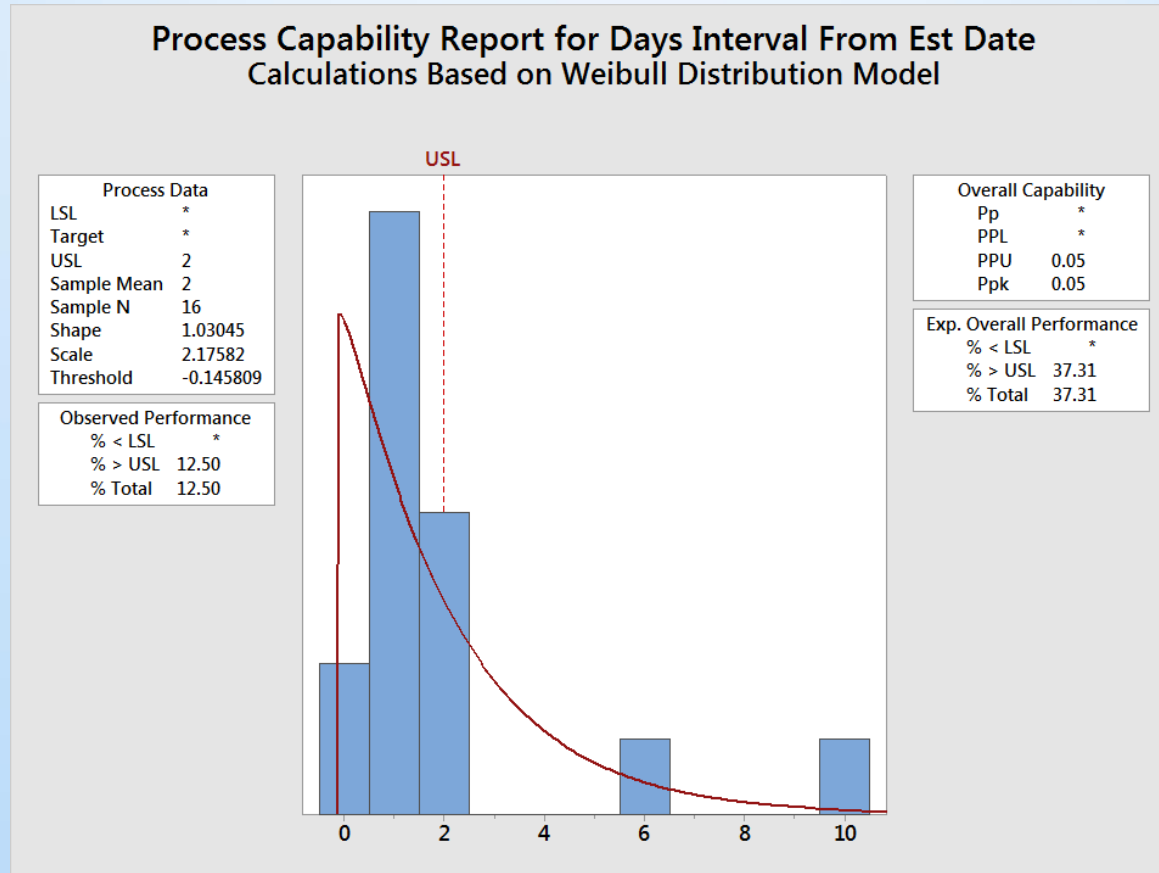


# Before L6S



- ❖ Original process map within the ARTF had 13 NVA activities; new process map down to two NVA activities and three VA activities.
- ❖ Time and resources needed to complete the two NVA activities have been minimized.

# New Capability Analysis



- ❖ Sample data: 16 newly established ARs.
- ❖ 87.5 % of letters were issued within the two day target versus 0% before Lean improvements.

# Control Plan

- ❖ Track all units' productivity with the implementation of the round-robin system.
  - Supervisors will track the aging reports weekly to determine % of notification letters mailed within two day target.
  - GB will report to Process Owner monthly using the P-Chart.
  - Productivity tracking charts will be displayed in large graphs to ensure staff is aware of teams' progress.
- ❖ Incorporate improvements in phases to other areas.
- ❖ Update and improve standard work.



# *Additional Benefits*

- ❖ Staff time is efficiently used without the reworks and duplicate efforts in running, sorting and analyzing aging reports.
- ❖ Workload balancing will improve staff's morale and increase productivity.
- ❖ More organized work stations for Personnel Specialists.
- ❖ Improve the work flow by co-locating the specialists and supervisors in the same work area so AR questions are resolved on the spot.
- ❖ Better customer service when employees are timely notified when overpayments occur.
- ❖ Moving forward, Office of Personnel Services is taking the “Lean” journey for other process improvement projects!



Define



Measure



Analyze



Improve



Control



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